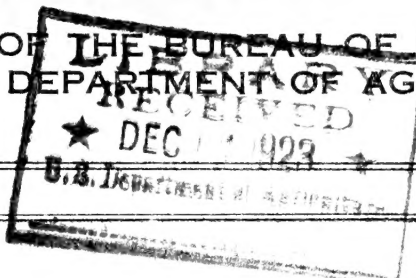


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MONTHLY LETTER OF THE BUREAU OF ENTOMOLOGY
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HARRY W. VINTON

Harry W. Vinton, who was employed in the Bureau of Entomology for more than 17 years, died at Pittsfield, Mass., October 29, 1923. About two years ago Mr. Vinton suffered a severe attack of pneumonia and since that time has steadily declined in health, although he was able to attend to his duties until last July.

Throughout his long employment with the Bureau Mr. Vinton worked on the Gipsy Moth and Brown-tail Moth project. He was made first assistant to the officer in charge of field control work against these insects when work was begun by the Bureau in 1906. In 1913 he was assigned to the position of first assistant in the quarantine section of the moth work and retained this position up to the time of his death.

Prior to his employment with the Bureau, Mr. Vinton served the State of Massachusetts in various capacities in the work conducted by that State against the gipsy moth and the brown-tail moth, having begun his employment with the State in April, 1893.

Being naturally observant and interested in insect and bird life, Mr. Vinton became well acquainted with many of the New England species.

His ability and long experience in field operations, including quarantine work, made him an especially valuable and efficient employee. His loss to the Bureau is greatly regretted by all those who knew him.--A. F. B.

CEREAL AND FORAGE INSECT INVESTIGATIONS

G. A. Dean, Entomologist in Charge

The final scenes for a new motion picture film on the corn borer adapted to middle western conditions were taken in Ohio during the week of November 26. It is hoped to have this film ready for exhibition some time during the first half of December.

The storehouse and motor base for the corn borer quarantine control work in the Middle West has been transferred from Toledo, Ohio, to the corner of Clark and Kipling Streets, Elyria, Ohio. C. E. Towle will be in charge.

W. R. Walton and L. H. Worthley visited Brooklyn, N. Y., November 23 to inspect an area near Fort Hamilton which recently has become infested with the European corn borer.

Prof. Geo. A. Dean has just returned from an extended trip, during which he visited the field stations of Cereal and Forage Insect Investigations at Arlington, Mass., Silver Creek, N. Y., Sandusky, Ohio, Charlottesville, Va., LaFayette, Ind., Centralia, Ill., Webster Grove, Mo., Wichita, Kans., Salt Lake City, Utah, Billings, Mont., Ritzville, Wash., Forest Grove, Oreg., Sacramento, Calif., Tempe, Ariz., and San Antonio, Texas. He also visited many of the departments of entomology of the agricultural colleges and State universities, and had conferences with entomologists and with the directors of the experiment stations of many of the States. In all of the places visited and at the conferences attended he found a deep interest in entomological work and a splendid spirit of willingness to enter into cooperative work.

TRUCK-CROP INSECT INVESTIGATIONS

J. E. Graf, Entomologist Acting in Charge

J. E. Dudley visited Washington during the latter part of November to take part in the pea aphid conference and revise publications for reprinting.

R. E. Campbell has just returned to his station at Alhambra, Calif., from a visit to the San Francisco Bay pea-growing regions, where he has outlined control experiments for the coming season.

E. G. Smyth has just returned to Washington from Mexico and Guatemala, where he was engaged in collecting and shipping parasites of the Mexican bean beetle. While Mr. Smyth did not discover any new parasites of this insect, he collected large numbers of a tachinid parasite in the vicinity of Mexico City. Some of these parasites were sent to the western station in New Mexico for hibernation, but most of them were shipped to Birmingham, Ala.

W. H. White visited Onley on the Eastern Shore of Virginia November 7 and 8, where he investigated an outbreak of the tuber moth on potatoes in the East.

A pea aphid conference was held at the Bureau of Entomology November 20 and 21. This meeting was called primarily to continue the cooperative work initiated at Chicago last year, review the accomplishments of the past season, and make plans for further work. Representatives from the entomological departments of the important pea-canning States were present, in addition to pea canners, entomologists of some of the insecticide companies, and members of the Bureau of Entomology. The State representatives included T. J. Headlee, of New Jersey, P. J. Parrot, of New York, Herbert Spencer, of Virginia, E. N. Cory, C. C. Hamilton, Geo. S. Langford, and S. F. Potts, of Maryland, W. P. Flint, of Illinois, J. J. Davis, of Indiana, C. L. Fluke, of Wisconsin, and E. O. Essig, of California.

FOREST INSECT INVESTIGATIONS

F. C. Craighead, Forest Entomologist in Charge

Doctor Craighead left Washington November 25 to attend a conference of the western field men at Klamath Falls, Oreg. The program involves a review of recent control projects and the results obtained, also a discussion of epidemics of defoliating insects which are causing extensive losses at several points in the West. Forest insect surveys, including estimates of the annual losses caused by barkbeetles and special investigations on various phases of control, cycles of outbreaks, etc., will be considered.

En route to Klamath Falls, Doctor Craighead will stop at the Minnesota Agricultural Experiment Station, St. Paul, Minn., to confer with Dr. Wm. A. Riley and Dr. S. A. Graham, and with R. Zon of the Forest Service Experiment Station regarding investigations in forest insects in the Lake States, in cooperation with these institutions.

Dr. M. W. Blackman, of the New York State College of Forestry, recently spent several days in Washington conferring with officials of the Division of Forest Insects and examining types of Scolytidae. It was agreed that closer understanding of the respective forest insect investigations conducted by the New York State College of Forestry and the Division of Forest Insects of the Bureau of Entomology would be of benefit to both institutions. Doctor Blackman has undertaken to assist the Division of Forest Insects in the determination of Scolytidae.

J. C. Evenden has submitted some interesting data on the results of submerging white pine logs to destroy wood-boring larvae. During the season of 1922 a serious fire occurred in the Marble Creek drainage of the St. Joe River, Idaho. Several logging camps were destroyed, and from 150 to 200 million board feet of high quality white pine was killed. Before the fire was completely extinguished, plans were made for the salvage of as large a percentage of this fire-killed timber as possible. A few weeks after the fire it was noticed that a large percentage was heavily infested with wood-borers. Inasmuch as freezing weather would set in within a few days, it was believed that little further damage would be done by the attacking larvae during that season. Furthermore, as these logs were to be driven through 30 miles of white water and 60 miles of still water, which would require several weeks, it was believed that the insects would be killed and that there would be no further damage to the logs, as the drive would occur before spring activity would take place. When the first of these logs arrived at the mill, however, it was found that the larvae were very much alive and soon became active when placed in the sun. Though there was a very heavy mortality, there were still many larvae which were not killed by the submergence in water for a period of over six weeks.

J. M. Miller has raised the question, "What caused the outbreak of Dendroctonus brevicornis on the California National Forest?" An examination

of the area where a rather spectacular outbreak developed during 1922 was made during the period from October 20 to 27. Because of the large grouping of yellow pine killed by D. brevicomis in 1922, a decline of infestation in 1923 was expected, but the extent of the decline which actually occurred was beyond anything previously recorded in any infestation studied. On an area near Alder Springs where 120 trees were spotted in the fall of 1922, only 4 trees were found this year. The 700-acre check on Elk Mountain, where 27 trees were killed in 1921, increased to 225 trees in 1922, but in 1923 only 8 newly infested trees could be found, only one of these being infested by the fall brood. Everywhere the pine type was examined a similar condition was found. The outbreak has simply disappeared in thin air. Mr. Person spent all of the time on the check area in an examination of bark to collect data regarding predators, degree of attack, and degree of emergence in the trees of 1921, 1922, and 1923. A summary of these data will probably bring out some important and interesting conclusions.

J. E. Patterson, H. L. Person, and P. D. Sergeant recently completed a survey of the slash on the Keno sector of the Greenspring Highway, Oregon. This slash was made in May, June, and July, 1923. It consisted of the entire trees bucked to the side of the right-of-way. Of this slash 77 per cent was fir, both Douglas and white. The pine only was examined. The trees were mostly of medium to large diameters, and despite the fact that the slash examined is in stands where there has never been a heavy infestation (not over 10 trees per section), but 17 per cent of the trees had been heavily attacked by D. brevicomis. A preliminary analysis made by Mr. Person shows a brood mortality in this slash of 80 per cent and when the subsequent flight mortality of approximately 30 per cent is considered we find the breeding of the beetles in this slash has actually resulted in a considerable decrease in the infestation in the area traversed by the highway.

Dr. H. E. Burke writes that at last a way has been found to make the cable beetle bore into the cable when we desire him to do so. Take an ordinary cabinet hinge, place it against the cable with the level sides of the screw holes facing the cable, place a beetle in the hole, cover with a cover glass, and the beetle will bore into the cable every time. Face the bevel sides of the holes away from the cable and the beetles will not bore the cable but will attempt to bore the cover glass. All of this indicates that it is the contact stimulus which causes the insect to bore.

SOUTHERN FIELD-CROP INSECT INVESTIGATIONS

J. L. Webb, Entomologist Acting in Charge

Dr. W. D. Hunter and B. R. Coad went to New Orleans November 19 to attend a meeting of the permanent committee appointed by the National Boll Weevil Menace Convention in October.

W. B. Williams of the Tallulah, La., laboratory has resigned to enter private business.

J. N. Tenhet of the Quincy, Fla., laboratory left Quincy November 28 for Clarksville, Tenn., where he will remain some time.

A rather extensive acreage of cigarette tobacco will be planted in portions of northern Florida the coming season for the first time. Plans are being made by the Bureau to determine practical methods of insect control for this type of tobacco under the existing conditions. Previous to this time the region mentioned has restricted itself to the cigar-wrapper type of tobacco.

T. E. Holloway was in southern Georgia for a short time during November obtaining the results of experiments on control of the sugar-cane mealybug. J. W. Ingram was afterwards sent there from his station at Crowley, La., and has been engaged in starting field experiments of the same kind on a larger scale.

T. E. Holloway and W. E. Haley, assisted by J. W. Ingram, have been making examinations on Louisiana plantations for the Cuban tachinid parasite of the sugar-cane moth borer, which was released at 41 places during 1920. They found the parasite at 16 plantations, at 6 of which it had never been recovered before. At some time since 1920 the parasite has been recovered at 32 plantations out of the 41. There are indications that the parasite is becoming distributed over the sugar section, though there is no proof that it is controlling the borer at any one place.

T. C. Barber traveled in northeastern Mexico during November, investigating sugar-cane insects and making a general collection of the insects of economic importance in that region.

BEE CULTURE INVESTIGATIONS

E. F. Phillips, Apiculturist in Charge

Dr. E. F. Phillips is attending a series of meetings of beekeepers in North Dakota, South Dakota, Montana, Wyoming, Colorado, and Illinois.

W. J. Nolan is leaving the first week in December for a short trip to Europe. While abroad he intends to meet some of the leaders in scientific apicultural work in France, Czechoslovakia, Switzerland, Austria, and Germany.

Dr. A. P. Sturtevant will return to resume his work on bee diseases about December 1.

C. L. Fluke, Professor in Entomology, University of Wisconsin, was a recent visitor at the Bee Culture Laboratory.

The Australian Government some time ago prohibited importation of adult bees to prevent the introduction of serious diseases of adult bees, such as

the Isle of Wight disease. An exception is made of the United States, this being the only country from which importations are permitted.

FRUIT INSECT INVESTIGATIONS

A. L. Quaintance, Entomologist in Charge

C. P. Clausen and J. L. King, who have been working in the Orient, with headquarters at Yokohama, Japan, in search of parasites of the Japanese beetle, are now in Washington.

Mr. Fred E. Brooks, of the French Creek, W. Va., station, states: "Several complaints have recently come to the station regarding injury to walnuts by the walnut husk-maggot, Rhagoletis suavis Loew. Under date of November 1, 1923, Dr. H. E. Hale, New York City, in writing of injury by this species to Persian walnuts at Princeton, N. J., says: 'This season they ruined the crop. The worms have made our trees valueless.' Doctor Hale expects to attempt the control of the maggots next season with arsenical sprays. Robert Moore, Brighton, N. J., also reports injury to Persian walnuts by this maggot. E. H. Riehl, Godfrey, Ill., writes that in the thinner-shelled varieties of our native black walnut the dark juice in the husk induced by the feeding of the maggots penetrates to the kernel, discoloring it and impairing the flavor.

"In attempting to control chestnut weevils by spraying, considerable injury was done to several trees of hybrid varieties at Bell Station, Md., with lead-arsenate spray used at a strength of 2 pounds of the lead to 50 gallons of water. W. R. Fickes, Wooster, Ohio, also injured trees of Boone, Paragon, Fuller, and Progress chestnuts, with a similar spray. Both the foliage and immature burs were more or less injured by the applications."

Oliver I. Snapp reports: "A large quantity of lubricating-oil emulsion will be used this winter for the control of the San Jose scale on peach trees in the Georgia peach belt. One manufacturer has already sold 14 carloads in the district. Some growers have constructed plants and are manufacturing their own emulsion. The laboratory has not yet had sufficient experience with the new emulsion to determine definitely the effects on peach trees from the continued annual use of the material. Consequently no recommendation for its use on peach trees has been issued from the laboratory. Nevertheless many growers are so well satisfied with what has been learned about the material to date that they are using it in their commercial peach orchards this winter on their own responsibility. Scale spraying has already begun, and indications point to a heavy use of the engine-oil emulsion here."

MISCELLANEOUS INVESTIGATIONS

(Items from the National Museum contributed by S. A. Rohwer)

Dr. E. O. Essig, of the California Agricultural Experiment Station, Berkeley, Calif., visited the Division of Insects for a few hours November 27. Doctor Essig is especially interested in methods of arranging collections, types of cases, and the amount of material represented in various groups, and also was glad of the opportunity to become acquainted with various workers in the Division.

S. W. Frost, of Arendtsville, Pa., spent a week working with Doctor Böving on leaf-mining coleopterous larvae. Mr. Frost has made a specialty of the study of leaf-miners, and hopes to have an opportunity to study the preserved material and slides in the National Collection.

C. C. Hamilton, of the University of Maryland, who recently completed an arrangement of the collection of the immature stages of Cicindela, is continuing his work on the immature stages of the larvae of the beetle family Carabidae. He is spending one day a week in the Division.

The collection of exotic coleopterous larvae has recently been rearranged and labelled in conformity with the Heyden, Reitter, and Weise catalogues of Coleoptera. The bulk of this exotic material comes from Europe. The collection occupies 1,185 vials, and the rearrangement has taken about six months. The work has been done by Mrs. Nellie McConnell under the direction of Doctor Böving.

Doctor Böving has recently received as a loan for comparison with North American forms four elaterid larvae from Denmark, and he and Mr. Hyslop are continuing their work on the arrangement and classification of the elaterid larvae in the collection.

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Mabel Colcord, Librarian

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